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Brand Preference and Advertising Recall in Adolescent Smokers: Some Implications for Health Promotion

SIMON CHAPMAN AND BILL FITZGERALD

Abstract: A survey on brand preference and cigarette advertising recall in 1,195 school children was conducted in Sydney, Australia. Four of the 130 available brands accounted for the cigarettes smoked by 78.7 per cent of smokers. Smokers were nearly twice as likely to correctly identify edited cigarette advertisements and slogans than were non-smokers. Brand preference is considered an important descriptor of smoking profiles. *(Am J Public Health* 1982; 72:491–494.)

As part of an anti-smoking school education program,* items were included in a pre-test survey on brand preference and cigarette advertising recall. It was hypothesized that: 1) outstanding patterns of brand preference would be found in the sample; 2) smokers would be more familiar with cigarette advertisements than would non-smokers; and 3) advertisements most familiar to smokers would be those brands most smoked by them.

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*Report available from principal author.

Methods

Thirty secondary schools were randomly selected from a numbered, alphabetical list of all schools in the Sydney metropolitan area. Nineteen agreed to run the educational program in April 1980.

Participating seventh and eighth grade teachers were requested to administer the questionnaire to all their pupils. Considerable inter-school variation in numbers of children receiving the program occurred because of varying teaching loads. Any conclusions arising from the study may not warrant generalization to school children at large, but to school children in schools with teachers interested in running such a program. The sample (Table 1) overrepresented the New South Wales school population in females and grade 8 students, but was representative of social class population distribution, as measured by parental occupational status. Data in Tables 2–6 derive from affirmative responses to the question "Have you smoked in the last four weeks?", the question considered to define the outer limit of the definition of a recent or current smoker.

In order to determine whether any relationship existed between brand smoked and rate of smoking, brand preference was cross tabulated with data from three questions that discriminated between light, medium, and heavy smoking (Table 3).

Subjects were presented with photographs of eight print media cigarette advertisements that had been edited to remove all identifying writing. Advertisements for five heavily advertised brands (Winfield, Marlboro, Dunhill,

TABLE 1—Age and Sex Distribution of Sample

Age (years)	Per Cent Male (n = 484)	Per Cent Female (n = 706)	Per Cent Total* (n = 1190)
14	9.9	9.9	9.9
13	43.6	45.9	45.0
12	42.2	38.4	40.0
11	4.3	5.8	5.2
TOTAL	40.7	59.3	100.0

*47.9% grade 7; 52.1% grade 8. Data missing in 5 cases.

TABLE 2—"What Brand of Cigarette Do You Usually Smoke?" (%)

Brand	% Male (n = 90)	% Female (n = 130)	% Grade 7 (n = 84)	% Grade 8 (n = 136)	% Total (n = 220)	% Sydney Smokers 16 + # (n = 341)
Winfield	45.6	50.0	51.2	46.3	48.2	28.7
Benson & Hedges	7.8	10.0	8.3	9.6	9.1	13.8
Alpine	6.7	4.6	8.3	3.7	5.5	5.0
Marlboro	5.5	2.3	4.8	3.0	3.6	5.0
All Others	7.8	6.2	4.8	8.1	6.8	47.5
"Any"	14.5	10.0	10.7	12.5	11.8	—
Not stated	12.2	16.9	11.9	16.9	15.0	—
TOTAL	100.0	100.0	100.0	100.0	100.0	100.00

Data from July 1980 survey of 341 Sydney Smokers by Roy Morgan Research Pty. Ltd., Sydney N.S.W.

TABLE 3—Smoking Rate by Brand Smoked

Brand	Number	Per Cent Distribution		
		Heavy	Medium	Light
Winfield	106	50.0	27.4	22.7
All Others	55	27.3	38.2	34.6
"Any"	26	7.7	34.6	57.7
TOTAL	187	37.4	31.4	31.0

*Heavy: usually smoke every day.
Medium: usually smoke one or more times a week.
Light: smoked in last four weeks.

Alpine and Longbeach) and three less frequently advertised brands (Kent, Craven Mild and one example from a multifarious Benson and Hedges campaign) were used to test hypothesis 2 (Table 4). The corresponding slogans used in the advertisements were similarly edited and presented in a different order to the edited photographs to form slogan completion exercises (Table 5).

To test the hypothesis that smokers would be more likely to be aware of cigarette advertisements generally than would non-smokers, the total number of advertisements and slogans (range 0–8) were used as the two dependent variables in two separate, two-way analyses of variance (ANOVA). The two independent variables were smoking status and sex (Table 6).

Results

Of more than 130 different brands of cigarette then retailed in Australia, Table 2 shows that just four brands (Winfield, Benson and Hedges, Alpine, and Marlboro) account for cigarettes smoked by 78.9 per cent of the smokers confirming hypothesis 1.

The brand preferences of our sample reflected those of adult smokers in Sydney found in another survey taken three months later, but differed in proportion. This was chiefly due to a much greater proportion of children smoking the Winfield brand (Table 2).

Compared with smokers of other brands (including indiscriminate brand smokers) Winfield smokers have a

TABLE 4—Correct Identification of Edited Cigarette Advertisements

Advertisements	% Smokers (n = 220)	% Non-smokers (n = 975)
Winfield	88.2	45.2
Marlboro	87.8	46.5
Dunhill	70.0	34.2
Longbeach	36.9	18.3
Alpine	55.5	24.1
Kent	2.8	4.8
Craven Mild	9.1	4.0
Benson and Hedges	2.3	1.1

significantly greater proportion of heavy smokers, while smokers claiming no brand preference are more likely to be light, infrequent smokers ($\chi^2 = 21.99$, df = 4, $p < 00.1$) (Table 3).

In every case but one, nearly twice the proportion of smokers were able to correctly recognize both advertisements and slogans than could non-smokers. (Tables 4, 5, 6), thus confirming hypothesis 2.

Comparing the left hand columns of Tables 4 and 5 with the data in Tables 2 and 3, we find that with the exception of the cases of Dunhill and Benson and Hedges, hypothesis 3, that the preferred brands of adolescent smokers would correspond with the advertisements and slogans most recognized by them, is generally borne out. Benson and Hedges, while being the second most smoked brand, was the least identified advertisement and the third least recognized slogan among both smokers and non-smokers. This may be the result of the particular Benson and Hedges advertisement selected (being one of perhaps a dozen different advertisements in the brand's series) rather than any contrary case against our hypothesis. The Dunhill advertisement and slogan both scored highly, but the brand was smoked by very few (n = 5) children. We believe this also may have been because the advertisement used featured a Dunhill pack with the identifying wording blocked out, but which still could be identified as Dunhill. The high score for the Dunhill slogan appears the only case against our hypothesis.

Discussion

Despite the first clause in the Australian media industry's self regulatory code for cigarette advertising which states "cigarette advertising should be directed only to adult smokers . . ."[1] our data clearly show that adolescents are well aware of advertisements.

The predictable tobacco industry response to adolescent brand preference figures would be to claim that their "primary cause" is peer influence. To this one need only ask how it is that such peer influence becomes established along the brand loci that it does—a function of advertising the industry has never denied in the case of adults.

In May 1980, a complaint organized by the Australian public interest group—the Movement Opposed to the Promotion of Unhealthy Products (MOP UP)—that the advertising of Winfield by a popular celebrity breached a clause in the Voluntary Advertising Code for Cigarettes, was upheld and the use of the celebrity ceased.[2] The complaint was upheld on the basis that the celebrity's "major appeal" was to children and adolescents. The data in this paper are further testimony to the justice of this decision. Winfield and, to a much lesser extent, the other three leading brands, virtually account for the smoking habits of Sydney adolescents.

Our finding that young smokers who smoke "any" brand tend more toward the light-medium range of smoking rates than do smokers who are brand loyal is of special interest. It suggests that part of the "career" of becoming a regular smoker is to adopt a preferred brand. Established, regular smokers are thus particular brand smokers more so than are casual smokers, yet health promotion efforts have generally ignored such a pronounced phenomenon.

The role played by advertising in the decision to smoke clearly needs refining conceptually so the appropriate questions may be asked in research. Following Fishbein,[3] we believe that tobacco advertising is most instructively seen as a cue to smoking behavior, whether this be already established or something that could develop in the future.

As a cue, it may operate specifically in the way that the behavior of other smokers has been found to cue smoking,[4] or more generally as a cue to setting into train an appealing

TABLE 5—Correct Completion of Edited Cigarette Slogans

Slogan	% Smokers (n = 220)	% Non-smokers (n = 975)	Slogans
Winfield	90.5	48.0	Anyhow (have a Winfield)
Marlboro	11.4	5.8	Come to where the (flavor is Marlboro country)
Dunhill	57.3	30.3	The house of (Dunhill)
Longbeach	24.1	8.8	25 of life's (simple pleasures)
Alpine	18.2	9.6	Fresh is the (flavor of Alpine)
Kent	2.3	1.8	Come for the filter (you'll stay for the taste)
Craven Mild	1.9	0.6	Mild as can be, yet (they satisfy me)
Benson and Hedges	6.9	3.7	Pocket a little (gold)

TABLE 6—Correct Identification of Edited Cigarette Advertisements and Slogans Mean Number Correct by Smoking Status and Sex*

	Male	Female	Grand Mean
	Advertisements		
Smokers	3.69 (89)	3.38 (131)	3.51 (220)#
Non Smokers	3.07 (395)	2.90 (575)	2.97 (970)#
Grand Mean	3.18 (484)	2.99 (706)	3.07 (1190)
	Slogans		
Smokers	2.12 (89)	2.11 (131)	2.11 (220)**
Non Smokers	1.77 (395)	1.80 (575)	1.79 (970)**
Grand Mean	1.84 (484)	1.86 (706)	1.85 (1190)

*Numbers in each category in parentheses.
#F(1, 1186) = 22.34 $p < .001$ (ANOVA)
**F(1, 1186) = 12.63 $p < .001$ (ANOVA)

sense of self-identity suggested by the specific themes used in different brand advertising.[5]

Cigarette smoking is generally considered for research and educational purposes as a "generic" behavior. As Gertrude Stein might have put it, "a smoker is a smoker is a smoker". We believe that rather than considering any given smoker as simply a smoker, investigators would be wise to make a conceptual shift and consider several categories of smokers classified by brand smoked.

Following from this, important implications may exist for anti-smoking education programs tailored to meet not simply the pressures to be a smoker, but those to be a certain sort of smoker. Health promoters would do well to incorporate the same principles of audience and market research used by tobacco companies to sell cigarettes, in the planning of their efforts to *unsell* smoking.

It should be recognized that cigarette advertising's cultural function is much more than the selling of cigarettes. Its collective images represent a corpus of deeply rooted cultural mythologies that are not simply pieces of advertising creativity, but icons that pose solutions to real, experienced problems of identity. As such, the concentration around four brands by adolescent smokers should serve as a clue to the cultural role that cigarettes are increasingly playing in the lives of youth.

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